

**ABSTRACT**

An integrated circuit is described including internal circuitry and having at least one external connection. A pad cell is electrically interposed between the external connection and the internal circuitry, the pad cell comprising a first group of components adapted to protect the internal circuitry from transients at the external connection and providing, during normal operating conditions of the integrated circuit, a first signal path to the internal circuitry, and a second group of components providing a second signal path from the external connection to the internal circuitry. The second signal path is non-operable during the normal operating conditions but on application of a predefined voltage at the external connection becomes operable.